STATEMENT OF WORK

Air Quality Monitoring Capacity Building in Central America SMALL BUSINESS SET-ASIDE

This statement of work outlines tasks for the implementation of an EPA air quality monitoring project to build capacity in Central America, develop monitoring networks in key countries, and to develop a regional air quality laboratory. Specifically, the contractor shall provide technical assistance to the governments, universities and technical institutes in the region. The contractor shall repair and conduct acceptance testing for the second-hand, donated air monitoring and laboratory instruments. The contractor shall install the instruments at four different sites in Central America. The four sites in Panama are Cruce de San Miguelito Station, University of Panama Campus Station, University of Panama-Curundu Station and the Hipodromo Station. The contractor shall train the technicians at the sites on how to operate and maintain the equipment to collect accurate data. The contractor shall adopt a modular phased approach, not to exceed the period of performance for this contract, to provide equipment and training. The contractor shall install the instruments to meet internationally accepted siting criteria and shall follow USEPA 40 CFR 58 criteria as closely as possible. The contractor shall conduct performance audits to ensure effectiveness of the instruments and training provided as well as data collection.

Project Period: Date of award through May 31, 2007

Background:

In Central America, mobile and stationary sources of air pollution present a serious threat to human health and the environment. Ozone, air toxics and particulate matter from the mobile and stationary sources have direct negative impacts on human health. In addition, the hydrocarbons, nitrogen oxides and carbon dioxide emitted contribute significantly to the concentration of greenhouse gases in the atmosphere. Cross-border air pollution arising from forest fires and other sources affects the Central America, making it difficult to determine whether the air pollution problems are caused by vehicles, agricultural burning, forest fires, or industrial pollution. To address these issues, the U.S. Environmental Protection Agency (USEPA) is developing a Central America project, with initial focus on Panama and Guatemala, that will assist key Central American officials to acquire much needed air quality data and to use the data to try to create a long-term strategy for dealing with air pollution from mobile and stationary sources. This type of information is vital for successful air quality management, and will form the basis of more effective regional solutions to air quality management problems by building capacity in Central America for air quality monitoring, developing monitoring networks in key countries, and developing a regional air quality laboratory.

The key goals are to: (1) set up air quality monitoring stations in key parts of Central America; (2) train staff in the use of this equipment; (3) make use of these air pollution data for decision making; and (4) develop a regional air quality laboratory.

This Statement of Work will focus on the on facilitating the donation of used equipment from the

US state and local governments, evaluating the used equipment, conducting acceptance testing on some of this equipment, and evaluating the monitoring equipment and capabilities in Central America with initial focus on Panama and Guatemala..

Objectives:

- 1. Store, repair, refurbish and transfer air monitoring and laboratory equipment to Panama..
- 2. Install the donated equipment to meet internationally accepted siting criteria and follow USEPA 40 CFR 58 criteria as closely as possible.
- 3. Conduct training for Central American technicians to learn how to operate and maintain the equipment.
- 4. Assist in the setting up a regional air monitoring laboratory in Panama
- 5. Train Central American staff on air monitoring and quality assurance and quality control techniques for PM (Particulate Matter) and Total Suspended Particulate (TSP).
- 6. Audit monitoring networks and laboratory, with focus on Panama and Guatemala.
- 7. Provide training and assistance on data evaluation, data interpretation and assistance in communicating data to decision-makers.

Tasks:

- 1. The contractor shall store 75 pieces of second-hand, donated air monitoring equipment for a period of 32 months.
- 2. The contractor shall conduct certification testing and select 50 of the best instruments.
- 3. The contractor shall repair and acquire necessary spare parts as needed for 28 air monitoring instruments.
- 4. The contractor shall request spare parts for the air monitoring equipment from State and local authorities. The Government will pay (not to exceed \$1500) for the shipment of the spare parts to a storage location identified by the Contractor.
- 5. The contractor shall manage the handling and shipping 28 air monitoring instruments to Panama.
- 6. The contractor shall install 28 pieces of air monitoring instruments at the designated sites in Panama.
- 7. The contractor, shall assist the government and the University of Panama in setting up a regional air monitoring laboratory.
- 8. For PM monitoring, the contractor shall train Central American staff on air monitoring and quality assurance and quality control techniques for PM and (TSP).
- 9. The contractor shall conduct training of technicians who will operate and maintain the

equipment.

- 10. The contractor shall assist Central American staff with the development of a Quality Assurance Procedures Plan (QAPP) for passive sampling, continuous monitoring, meteorological and metal monitoring and data storage.
- 11. The contractor shall conduct performance audits focused in Panama and Guatemala to measure the progress of the project.

Deliverables:

- 1. Store donated equipment in a facility for 32 months.
- 2. Inform the EPA project officer after 50 pieces have undergone an acceptance testing.
- 3. Inform the EPA officer after repairing and acquiring, if necessary, spare parts for 28 instruments.
- 4. Prepare 28 instruments for shipment.
- 5. A trip report for each trip taken to Central America outlining results of equipment installation and training shall be provided to the EPA Project Officer after each trip.
- 6. A trip report on the QA/QC training for PM monitoring.
- 7. A report on outcomes of the QAPP development for passive sampling, continuous monitoring, meteorological and metal monitoring and data storage for Panama.
- 8. A trip report for each trip taken to Central America outlining the audit objectives, results and next steps for Panama, Guatemala and the region shall be provided to the EPA Project Officer.

Other conditions:

The Government will not take possession of the any donated equipment. This equipment is being donated by State and local air monitoring stations to the contractor. The contractor shall dispose of the donated equipment not shipped to Panama.

The Contractor shall be required to identify themselves as contractor employees for the EPA. This included requirements for the contractor to always identify themselves orally by their name and organization, and to physically display through their dress or identification cards their name and organization.

The Contractor is permitted to subcontract with other parties as needed, including certification of equipment, shipping, installation of equipment and training Panamanian officials how to use the refurbished equipment.